

Application No.: 09/960,306

Docket No.: 20272-00688-US

**AMENDMENTS TO THE CLAIMS**

1. (Currently amended) An electrical socket comprising:

a retaining structure and a plurality of wires extending along the socket in a hyperboloid arrangement suitably exposed for contact with a male contact member inserted within the socket,

wherein said wires are arranged around a circumference of the socket in circumferentially adjacent groups of at least two wires each,

wherein a circumferential spacing of said at least two wires in each circumferentially adjacent group is closer than a circumferential spacing between ~~each~~ any adjacent pair of said circumferentially adjacent groups, and

wherein the circumferential spacing between ~~each~~ said any adjacent pair of said circumferentially adjacent groups is free of any wires, and

wherein each said wire of each said circumferentially adjacent group is arranged to make both direct physical and electrical contact with an outer surface of said male contact member when said male contact member is inserted within the socket.

2. (Currently amended) An electrical socket according to Claim 1, wherein said wires in each ~~group of~~ said circumferentially adjacent groups extend along the socket in contact with one another.

3. (Currently amended) An electrical socket according to Claim 1, wherein the socket includes three circumferentially adjacent groups of two wires each.

4. (Previously Presented) An electrical socket according to claim 1, wherein said retaining structure includes a ring at each end of the socket, and wherein said wires are retained in groups by attachment to said rings at opposite ends of the socket.

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5. (Currently amended) An electrical socket comprising:

a first support member at one end of the socket;

a second support member at an opposite end of the socket;

a first pair of resilient contact wires extending longitudinally along the socket at ~~an~~ a first angle with respect to a longitudinal axis of the socket;

wherein corresponding wires are attached to said first and second support members at opposite ends of the socket;

a second pair of resilient contact wires extending longitudinally along the socket at ~~an~~ a second angle with respect to the longitudinal axis of the socket;

said second pair of wires being circumferentially spaced around a circumference of the socket from a circumferential location of said first pair of wires on at least one of the first and second support members, and being attached with said first and second support members at opposite ends of the socket; and

a third pair of resilient contact wires extending longitudinally along the socket at ~~an~~ a third angle with respect to the longitudinal axis of the socket;

said third pair of wires being circumferentially spaced around the circumference of the socket from said first and second pairs, and being attached with said first and second support members at opposite ends of the socket such that the ~~three~~ first, second, and third pairs of resilient contact wires ~~make form~~ a hyperboloid arrangement and are suitably exposed for both direct physical and electrical contact with a male contact member inserted within the socket,

wherein a circumferential spacing around the circumference of the socket between adjacent wires in each of the first and second pairs of wires is less than a circumferential spacing around the circumference of the socket between each of the three pairs of wires, and

wherein the circumferential spacing around the circumference of the socket between any circumferentially adjacent pair of wires is free of any wires.

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Claims 6-10 (Canceled).

11. (Previously Presented) An electrical socket according to Claim 2, wherein the socket includes three groups of two wires each.

12. (Previously Presented) An electrical socket according to claim 2, wherein said retaining structure includes a ring at each end of the socket, and wherein said wires are retained in groups by attachment to said rings at opposite ends of the socket.

13. (Previously Presented) An electrical socket according to claim 3, wherein said retaining structure includes a ring at each end of the socket, and wherein said wires are retained in groups by attachment to said rings at opposite ends of the socket.